

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Currently Amended) A micromirror array device comprising at least two of a plurality of zones of separately controllable tiltable ~~reflecting~~ reflective elements, each of the tiltable ~~reflecting~~ reflective elements of a zone being tiltable ~~capable of tilting~~ about an axis of predetermined tilt orientation associated with the zone between a first reflecting position reflecting an incident beam to a predetermined first "on" direction (~~on direction~~) shared by all reflective elements of said at least two of a plurality of zones, and a second reflecting position reflecting the incident beam to a predetermined second "off" direction (~~off direction~~), each of said at least two of a plurality of zones having a predetermined off direction for all the reflecting elements in that zone, that is different from the off direction of at least one other zone of said at least two of a plurality of zones, wherein each of said at least two of a plurality of zones having a predetermined tilt orientation for all the reflective elements in that zone, that is different from the tilt orientation of at least one other zone of said at least two of a plurality of zones.
2. (Original) The device of claim 1, wherein said at least two of a plurality of zones comprise two zones.
3. (Original) The device of claim 1, wherein said at least two of a plurality of zones comprise four zones.
4. (Currently Amended) The device of claim 1, wherein the predetermined tilt orientation for all the ~~reflecting~~ reflective elements in that zone is orthogonal to the tilt orientation of the one other zone of said at least two of a plurality of zones.
5. (Original) The device of claim 1, wherein said at least two of a plurality of zones are adjacent each other.
6. (Currently Amended) The device of claim 1, wherein each ~~reflecting~~ reflective element is electrically actuated, being separately controlled by a control unit.

7. (Currently Amended) The device of claim 1, wherein a lens is further provided in front of the array in a predetermined distance from the array, placed in the on direction of all the ~~reflecting~~ reflective elements, of the plurality of zones.

8. (Currently amended) The device of claim [[1]] 7, wherein a normal of a given ~~reflecting~~ reflective element in a zone of said at least two of a plurality of zones, when the ~~reflecting~~ reflective element is positioned in the on direction coincides at a point on a plane adjacent the lens with a normal of a corresponding ~~reflecting~~ reflective element in one other zone of said at least two of a plurality of zones, when the corresponding ~~reflecting~~ reflective element is positioned in the off direction.

9-16. (Canceled)

17. (Currently Amended) A method for steering light comprising providing at least two of a plurality of zones of separately controllable tiltable ~~reflecting~~ reflective elements, each of the tiltable ~~reflecting~~ reflective elements of a zone being capable of tilting about an axis of predetermined tilt orientation associated with the zone between a first reflecting position reflecting an incident beam to a predetermined first "on" direction (~~on-direction~~) shared by all reflective elements of said at least two of a plurality of zones, and a second "off" reflecting position reflecting the incident beam to a predetermined second direction (~~off-direction~~), each of said at least two of a plurality of zones having a predetermined off direction for all the ~~reflecting~~ reflective elements in that zone, that is different from the off direction of at least one other zone of said at least two of a plurality of zones, wherein each of said at least two of a plurality of zones having a predetermined tilt orientation for all the reflective elements in that zone, that is different from the tilt orientation of at least one other zone of said at least two of a plurality of zones;

providing an illuminating beam source for separately illuminating each of said at least two of a plurality of zones of separately controllable tiltable ~~reflecting~~ reflective elements

illuminating said at least two of a plurality of zones of separately controllable tiltable ~~reflecting~~ reflective elements;

separately manipulating each of the separately controllable tiltable ~~reflecting~~
reflective elements between the on direction and off direction.

18. (Cancelled).

19. (Currently Amended) The method of claim [[18]] 17, wherein said at least two of a plurality of zones comprise two zones.

20. (Currently Amended) The method of claim [[18]] 17, wherein said at least two of a plurality of zones comprise four zones.

21. (New) An image projection system comprising:

illumination system for providing a plurality of illumination paths;

micromirror array device comprising at least two of a plurality of zones of separately controllable tiltable reflective elements, each of the tiltable reflective elements of a zone may be tilted about an axis of predetermined tilt orientation associated with the zone between a first reflecting position reflecting an incident beam to a predetermined first "on" direction shared by all reflective elements of said at least two of a plurality of zones, and a second reflecting position reflecting the incident beam to a predetermined second direction, each of said at least two of a plurality of zones having a predetermined off direction for all the reflecting elements in that zone, that is different from the off direction of at least one other zone of said at least two of a plurality of zones wherein each of said at least two of a plurality of zones of the micromirror device having a predetermined tilt orientation for all the reflective elements in that zone, that is different from the tilt orientation of at least one other zone of said at least two of a plurality of zones;

projection lens; and

at least two of a plurality of black cavities, corresponding to the number of "off" directions, for disposal of rejected light beams reflected in the "off" directions, wherein each illumination path of the illumination system illuminates a different zone of the micromirror array device,

whereby each illumination path of the illumination system is reflected towards one of the black cavities when the reflective elements of the zone which the illumination

path illuminates are tilted in the off direction or reflected towards the projection lens when the reflective elements of the zone which the illumination path illuminates are tilted in the on direction

22. (New) The system of claim 21, wherein said at least two of a plurality of zones comprise two zones.

23. (New) The system of claim 21, wherein said at least two of a plurality of zones comprise four zones.

24. (New) The system of claim 21, wherein the predetermined tilt orientation for all the reflective elements of the micromirror device in that zone is orthogonal to the tilt orientation of the one other zone of said at least two of a plurality of zones.

25. (New) The system of claim 21, wherein said at least two of a plurality of zones are adjacent each other.

26. (New) The system of claim 21, wherein each reflective element of the micromirror device is electrically actuated, being separately controlled by a control unit.

27. (New) The system of claim 21, wherein a lens is further provided in front of the array in a predetermined distance from the array, placed in the on direction of all the reflective elements, of the plurality of zones.

28. (New) The system of claim 27, wherein a normal of a given reflective element in a zone of said at least two of a plurality of zones, when the reflective element is positioned in the on direction coincides at a point on a plane adjacent the lens with a normal of a corresponding reflective element in one other zone of said at least two of a plurality of zones, when the corresponding reflective element is positioned in the off direction.

29. (New) A method for image projection comprising:

providing illumination system for providing a plurality of illumination paths;

providing a micromirror array device comprising at least two of a plurality of zones of separately controllable tiltable reflective elements, each of the tiltable reflective elements of a zone may be tilted about an axis of predetermined tilt orientation associated with the zone between a first reflecting position reflecting an incident beam to a predetermined first "on" direction shared by all reflective elements of said at least two of a plurality of zones, and a second reflecting position

reflecting the incident beam to a predetermined second "off" direction, each of said at least two of a plurality of zones having a predetermined off direction for all the reflective elements in that zone, that is different from the off direction of at least one other zone of said at least two of a plurality of zones;

providing a projection lens;

providing at least two of a plurality of black cavities, corresponding to the number of "off" directions, for disposal of rejected light beams reflected in the "off" directions,

wherein each illumination path of the illumination system illuminates a different zone of the micromirror array device;

illuminating said at least two of a plurality of zones of separately controllable tiltable reflective elements, each zone illuminated by a different illumination path;

separately manipulating each of the separately controllable tiltable reflective elements between the on direction and off direction.

30. (New) The method of claim 29, wherein each of said at least two of a plurality of zones having a predetermined tilt orientation for all the reflective elements in that zone, that is different from the tilt orientation of at least one other zone of said at least two of a plurality of zones.

31. (New) The method of claim 29, wherein said at least two of a plurality of zones comprise two zones.

32. (New) The method of claim 29, wherein said at least two of a plurality of zones comprise four zones.